UNITED STATES PATENT AND TRADEMARK OFFICE

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10/619,550	07/16/2003	Jong-Kook Kang	P-0566	5940

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,7,8,10,12 and 14-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,7,8,10,12 and 14-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection.   Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 2/16/07 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to the claims have been considered but are moot in

view of the new ground(s) of rejection.

However, since some of the references still apply, in response to Applicant's arguments

that Applicant's Admitted Prior Art (hereinafter "AAPA") fails to disclose monitoring, at a

mobile communications terminal, packets received or transmitted between a terminal equipment

and a network (Remarks: page 10, last paragraph), the Examiner respectfully disagrees. As

shown in prior art Figure 2, the terminal equipment (TE) (reference 10) requests connection (step

S1) to the mobile communications terminal (reference 20); if the connection is allowed (step S1),

the TE requests the start of data service (step S2), in which the mobile communications terminal

requests channel setup to the network (reference 30) and receives a channel setup completion

packet in return (step S3).   In order for the mobile communications terminal (reference 20) to

receive and allow connections, to receive requests of data service, and to request and receive

channel setup, it must monitor the packets received or transmitted between the TE and the

network. Note that, e.g., by knowing that a packet received from the TE is requesting data

service, it is inherently monitoring it. The term "monitoring" is broadly claimed; therefore,

broadly interpreted. During patent examination, the claims must be given their broadest

reasonable interpretation. MPEP 2111.

In addition, Applicant argues that Seki et al. fails to disclose or suggest a mobile

communications terminal. In response, the Examiner respectfully disagrees. Seki's figure 1

clearly shows terminal 10 as mobile, note that it is capable of being moved readily from place to

place, either by itself or in connection with personal computer 1 (shown in Fig. 1 as a portable

computer). Further, Figs. 1 and 2 show antenna for radio communication; thus, Seki does

disclose a mobile communications terminal.

Claim Objections

3.   Claims 1, 5, 7-8, 14, 16-18 are objected to because of the following informalities: the

term --number of-- should be added in between "counted packets" (Claim 1, line 14); the term --

mobile communications-- should precede "terminal" (Claims 5, 14, and 16, line 1; Claims 7 and

17, line 2) in order to be consistent with claim terminology. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 1, 5, 7-8, 10, 12, and 14-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Applicant's Admitted Prior Art (hereinafter "AAPA") in views of Seki et al.

(hereinafter "Seki"; Patent No.: 5,678,229) and Korpela (Patent No.: US 6,311,054).

Regarding claim 1, AAPA discloses a method for measuring by a terminal a service data amount received or transmitted at a terminal equipment (TE) (Fig. 2, reference 10) comprising:

monitoring packets received or transmitted between a terminal equipment (TE) and a network to determine if a monitored received or transmitted packet corresponds to a control packet indicating a control protocol setup state of the TE is established (Fig. 2; note that steps S1 through S3 and S5 through S7 are all control steps; also note that a control packet indicating a control protocol setup state of the TE is established is inherently present because otherwise the communication cannot be established. In order for the communication to be successfully established, it is inherent that the system knows if the packets are control packets or not);

cumulatively counting a number of all packets (Description of the Background of Art: page 3, lines 11-14), excluding packets added during a protocol stack setting process (Fig. 2; Description of the Background of Art: page 3, lines 11-14; note that the packets are counted from the point when the communication channel was set between the MT 20 and the PDSN 30; hence, excluding packets added during a protocol stack setting process, i.e., steps S1 through S3), received or transmitted until every protocol session of the TE is released if the control packet indicates the control protocol setup state of the TE is established (Fig. 2; Description of the Background of Art page 3, lines 11-15; note that the packets are counted from the point when the communication channel was set between the MT 20 and the PDSN 30 to the point of releasing, i.e., steps S5 through S7).

AAPA fails to specifically disclose monitoring at a mobile communications terminal; counting at the mobile communications terminal, the counting allowing the mobile communications terminal to determine a service data amount received or transmitted at the TE;

and displaying the counted number of packets on a display of the mobile communications terminal, the counted packets displayed on the terminal including only data in a payload of a transmission control protocol layer, wherein the monitoring and the counting are performed by the mobile communications terminal during a call connection networking between the TE and the network.

However, in the same field of endeavor, Seki, discloses monitoring at a mobile communications terminal (Fig. 1, reference 10; Abstract; col. 4, lines 13-21; col. 5, lines 18-27); counting at the mobile communications terminal (Abstract; col. 4, lines 13-21; col. 5, lines 18-27), the counting allowing the mobile communications terminal to determine a service data amount received or transmitted at the TE (Fig. 1, reference 1; Abstract; col. 4, lines 13-21; col. 5, lines 18-27) and displaying the counted number of packets on a display of the mobile communications terminal (Abstract; col. 4, lines 38-44; col. 5, lines 4-6 and 38-45), wherein the monitoring and the counting are performed by the mobile communications terminal during a call connection networking between the TE and the network (Abstract; col. 4, lines 38-44; col. 5, lines 4-6 and 38-45).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the mobile communications terminal AAPA to monitor, count, and display the counted number of packets as suggested by Seki for the advantages that the user can easily obtain information of data transmission through the display and can determine whether all the data have been transmitted (Seki: col. 5, lines 4-8) and for the advantages of providing a user with a more accurate measurement of the services used, taking in consideration

only the traffic; thereby, allowing the user to manage the data service more efficiently, thus, the user can estimate the associated data service charges accrued whenever necessary.

AAPA in combination with Seki fails to specifically disclose the counted packets displayed on the terminal including only data in a payload of a transmission control protocol layer.

However, in the same field of endeavor, Korpela discloses monitoring at a mobile communications terminal (Figs. 3-4, reference 18) packets received or transmitted (col. 2, lines 25-34 and from line 59 through col. 3, lines 7 and 19-36; col. 7, lines 10-19); cumulatively counting at the mobile communications terminal (Fig. 1, reference 3; Fig. 3, reference 12) a number of all packets (col. 1, lines 34-37 and 50-52; col. 2, lines 25-34 and from line 59 through col. 3, lines 7 and 19-36; col. 7, lines 10-19), excluding packets added during a protocol stack setting process (col. 1, lines 34-37 and 50-52; col. 2, lines 25-34 and from line 59 through col. 3, lines 7 and 19-36; col. 7, lines 10-19), received or transmitted until every protocol session is released (Fig. 1, reference 4-5; from col. 2, line 59 through col. 3, line 7; col. 7, lines 10-19), the counting allowing the mobile communications terminal to determine a service data amount received or transmitted (col. 1, lines 34-37 and 50-52; col. 2, lines 25-34 and from line 59 through col. 3, lines 7 and 19-36); and displaying the counted number of packets on a display of the mobile communications terminal (col. 1, lines 50-52; col. 2, lines 20-24 and 39-43), the counted packets displayed on the terminal including only data in a payload of a transmission control protocol layer (col. 1, 34-37 and lines 50-52; col. 2, lines 20-44; col. 3, lines 23-33; col. 7, lines 10-19), wherein the monitoring and the counting are performed by the mobile

communications terminal (Figs. 1 and 3; col.1, lines 50-52; col. 2, lines 25-34; col. 3, lines 19-38).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to include in the counted packets displayed of AAPA in combination with Seki only data in a payload of a transmission control protocol layer as suggested by Korpela for the advantages of extracting data that is liable to charges (Korpela: col. 7, lines 10-19) and pertinent to the terminal.

Regarding claim 5, in the obvious combination, AAPA and Seki both discloses wherein the terminal operates as a modem of the TE (Description of the Background of Art: page 2, lines 11-12; Seki: Fig. 1; col. 2, line 60).

Regarding claim 7, in the obvious combination, Seki discloses further comprising storing the counted number of packets in a non-volatile memory of the terminal (col. 3, lines 23-30; note that the memory being non-volatile is inherently present or an obvious expedient thereof in order for the content to remain in the terminal e.g., after powering off), and allowing a user to delete or initialize the counted number of packets via a user interface (Fig. 1, note the key pads of portable computer and reference 13; col. 2, lines 31-37). Further, Korpela also discloses further comprising storing the counted number of packets in a non-volatile memory of the terminal (Fig. 3, reference 11; col. 2, lines 12-13, 32-34; col. 3, lines 21-22; col. 4, lines 38-40; note that the memory being non-volatile is inherently present or an obvious expedient thereof in order for the content to remain in the terminal e.g., after powering off) and allowing a user to delete or initialize the counted number of packets via a user interface (Fig. 3, reference 14; col. 3, lines 35-36).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of

invention by applicant to store the counted number of packets in a non-volatile memory of the

terminal of AAPA in combination with Seki and Korpela and allowing a user to delete or

initialize the counted number of packets via a user interface as suggested by Seki and/or Korpela

for the advantages of allowing the content to remain in the terminal e.g., after powering off; and

allowing the user to manage the data service more efficiently, in addition to making it user-

friendlier.

Regarding claim 8, in the obvious combination, the references fail to specifically disclose

wherein the user searches the stored counted number of packets by a search function through the

user interface. However, both Seki and Korpela suggest this limitation. Seki discloses the user

determining whether all the data have been transmitted (col. 5, lines 4-8). Since the user needs to

know if all the data have been transmitted, it is suggesting wherein the user searches the stored

counted number of packets by a search function through the user interface. Therefore, it would

have been obvious to one of ordinary skill in this art at the time of invention by applicant to

search by the user the stored counted number of packets by a search function through the user

interface as suggested by Seki for the advantages of determining whether all the data have been

transmitted (Seki: col. 5, lines 6-8). In addition, Korpela discloses the user interface 14 for using

the mobile station in general and its charging facilities (col. 3, lines 35-36). It is an obvious

expedient that searching for the stored counted number of packets is a charging facility provided

to the user of the mobile station; thus, Korpela suggests wherein the user searches the stored

counted number of packets by a search function through the user interface. Therefore, it would

have been obvious to one of ordinary skill in this art at the time of invention by applicant to

search by the user the stored counted number of packets by a search function through the user

interface as suggested by Korpela for the advantages of being user-friendlier.

Regarding claim 10, AAPA discloses a method for measuring a service data amount in a

call connection networking between a terminal equipment (TE) (Fig. 2, reference 10) and a

network (Fig. 2, reference 30), comprising:

monitoring at a mobile communications terminal (Fig. 2, reference 20) packets received

or transmitted between the TE and the network to determine if a monitored received or

transmitted packet corresponds to a control packet indicating a control protocol setup state of the

TE is established (Fig. 2; note that steps S1 through S3 and S5 through S7 are all control steps;

also note that a control packet indicating a control protocol setup state of the TE is established is

inherently present because otherwise the communication cannot be established. In order for the

communication to be successfully established, it is inherent that the system knows if the packets

are control packets or not; See also *Response to Arguments* section above);

measuring an amount of provided data between the TE and the network when the control

packet indicates a channel for data transmission is set between the TE and the network

(Description of the Background of Art: page 3, lines 6-14);

wherein the monitoring and the measuring are performed during a call connection

networking between the TE and the network (Fig. 2);

wherein measuring the amount of provided data comprises:

counting a number of received or transmitted portions as the measured amount of data

(Description of the Background of Art: page 3, lines 11-14), and

wherein the measurement of the data amount is performed from a point when the transmission is set to a point when every protocol session of the TE is terminated (Description of the Background of Art: page 3, lines 11-14).

AAPA fails to explicitly disclose measuring at the mobile communications terminal; and displaying the measured amount of data on a screen of the terminal, removing a header and tailer from said packets received or transmitted between the TE and the network such that the measured amount of provided data corresponds only to the payload portions of the packets; and counting a number of received or transmitted **payload** portions as the measured amount of data.

However, Seki discloses measuring at the mobile communications terminal an amount of provided data (Fig. 1, reference 10; Abstract; col. 4, lines 13-21; col. 5, lines 18-27), displaying the measured amount of data on a screen of the terminal (Fig. 1, reference 14; col. 4, lines 37-44)

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to measure at the mobile communications terminal of AAPA an amount of provided data and displaying the measured amount of data on a screen of the terminal as suggested by Seki for the advantages of providing to the user immediate information (Seki: Abstract), having the measured amount directly available to the user, who can actively participate in how his telephone bill is determined, and the magnitude of the bill will not be a surprised to him/her.

AAPA in combination with Seki fail to specifically disclose removing a header and tailer from said packets received or transmitted between the TE and the network such that the measured amount of provided data corresponds only to the payload portions of the packets; and counting a number of received or transmitted **payload** portions as the measured amount of data.

However, in the same field of endeavor, Korpela discloses counting a number of received or transmitted **payload** portions as the measured amount of data (col. 1, 34-37 and lines 50-52; col. 2, lines 20-44; col. 3, lines 23-33; col. 7, lines 10-19).

Although Korpela fails to specifically disclose removing a header and tailer from said packets received or transmitted such that the measured amount of provided data corresponds only to the payload portions of the packets, the Examiner takes Official Notice of the fact that, at the time of invention by Applicant, it was notoriously well known in the art to remove a header and tailer from said packets such that the measured amount of provided data corresponds only to the payload portions of the packets for the advantages of using only data pertinent to the terminal.

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to remove a header and tailer from said packets received or transmitted such that the measured amount of provided data corresponds only to the payload portions of the packets and count a number of received or transmitted **payload** portions as the measured amount of data as suggested by Korpela for the advantages of extracting data that is liable to charges (Korpela: col. 7, lines 10-19) and pertinent to the terminal, as well as providing a user with a more accurate measurement of the services used, taking in consideration only the traffic; thereby, allowing the user to manage the data service more efficiently.

Regarding claim 12, in the obvious combination, Korpela discloses wherein the payload portions comprise a payload of a transmission control protocol layer (col. 1, 34-37 and lines 50-52; col. 2, lines 20-44; col. 3, lines 23-33; col. 7, lines 10-19).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of

invention by applicant to comprise in the payload portions of AAPA in combination with Seki

and Korpela a payload of a transmission control protocol layer as suggested by Korpela for the

advantages of extracting data that is liable to charges (Korpela: col. 7, lines 10-19) and pertinent

to the terminal.

Regarding claim 14, in the obvious combination, AAPA and Seki both discloses wherein

the terminal operates as a modem of the TE (Description of the Background of Art: page 2, lines

11-12; Seki: Fig. 1; col. 2, line 60).

Regarding claims 15-18, which recite a method version of claims 1, 5, and 7-8,

respectively, see rationale as previously discussed above.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571)
272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to
4:00pm.
          If attempts to . reach the examiner by telephone are unsuccessful, the examiner's
supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.
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msc   4/25/07

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